

Spent Nuclear Fuel - Focused on Outcomes



Dr. Phillip G. Loscoe
Director, Office of Spent Nuclear Fuel
March 2000



Department of Energy
Richland Operations Office



Spent Nuclear Fuel - Focused on Outcomes

Mission & Scope

- ◆ **The Spent Nuclear Fuels Project will move spent nuclear fuel from wet storage in the K-East and K-West Basins near the Columbia river to safe, dry, interim storage at the Canister Storage Building in the 200 Area Central Plateau while other Hanford SNF is consolidated outside at the Interim Storage Area pending final disposition.**
- ◆ **This project includes:**
 - ◆ **removing and repackaging spent nuclear fuel into multi-canister overpacks,**
 - ◆ **fuel drying, transporting and staging,**
 - ◆ **removing sludge and debris from the K Basins for appropriate disposition, and**
 - ◆ **treating and conditioning the water in the basins**



Project Assumptions for FY2002

- ◆ **Steady-state K-West fuel removal operations**
- ◆ **Cold Vacuum Drying (CVD) Facility will be in full operations**
 - ◆ **Prepares fuel for interim, dry storage**
- ◆ **Canister Storage Building will be receiving conditioned fuel from CVD Facility**



Spent Nuclear Fuel - Focused on Outcomes

Project Priorities

- ◆ **Maintain safe and compliant wet storage of the fuel in the K Basins pending completion of transition to dry storage**
- ◆ **Reduce Urgent Risks**
 - ◆ **Continue removing spent nuclear fuel (SNF) from the K Basins**
 - ◆ **Transition all Hanford SNF to low-cost, safe, interim, dry storage**
 - ◆ **Remove sludge from K Basins for disposition**



Accomplishments

- ◆ **Maintained Project Baseline utilizing**
 - ◆ **Contingency Management**
 - ◆ **Baseline Change Control**
 - ◆ **Risk Management**
- ◆ **Received K Basin Interim Remedial Action Record of Decision from EPA for sludge**
- ◆ **Closed all outstanding technical issues**
- ◆ **Upgraded Configuration Management controls**



Accomplishments (Continued)

- ◆ **Contractor restructured Operations Organization in preparation for transition to startup**
 - ◆ Submitted ORR Plan of Action
 - ◆ Assigned operations managers to all facilities
 - ◆ Initiated hiring of operations staff
- ◆ **All Safety Analysis Reports completed or nearing completion**
- ◆ **Commenced Phased Startup concept and initiated testing**



Accomplishments (Continued)

- ◆ **Completed all major construction activities in K-West Basin in preparation for fuel movement**
- ◆ **Completed construction of the Cold Vacuum Drying (CVD) Facility**
- ◆ **Completed construction of the Canister Storage Building**



Spent Nuclear Fuel - Focused on Outcomes

Workscope Comparison

	<u>FY 00</u>	<u>FY01</u>	<u>FY02</u>
Complete Canister Storage Building (CSB) FSAR Implementation	Comp		
Placement of CSB Storage Tubes in vault	Comp		
MCO fabrication, delivery, installation	✓	✓	✓
K-East Fuel Retrieval System & Integrated Water Treatment System Construction	✓	Comp	
K-West Basin Fuel Retrieval Operations	N/A	✓	✓

✓ - Fully Funded
Comp - Complete



Spent Nuclear Fuel - Focused on Outcomes

Workscope Comparison (Continued)

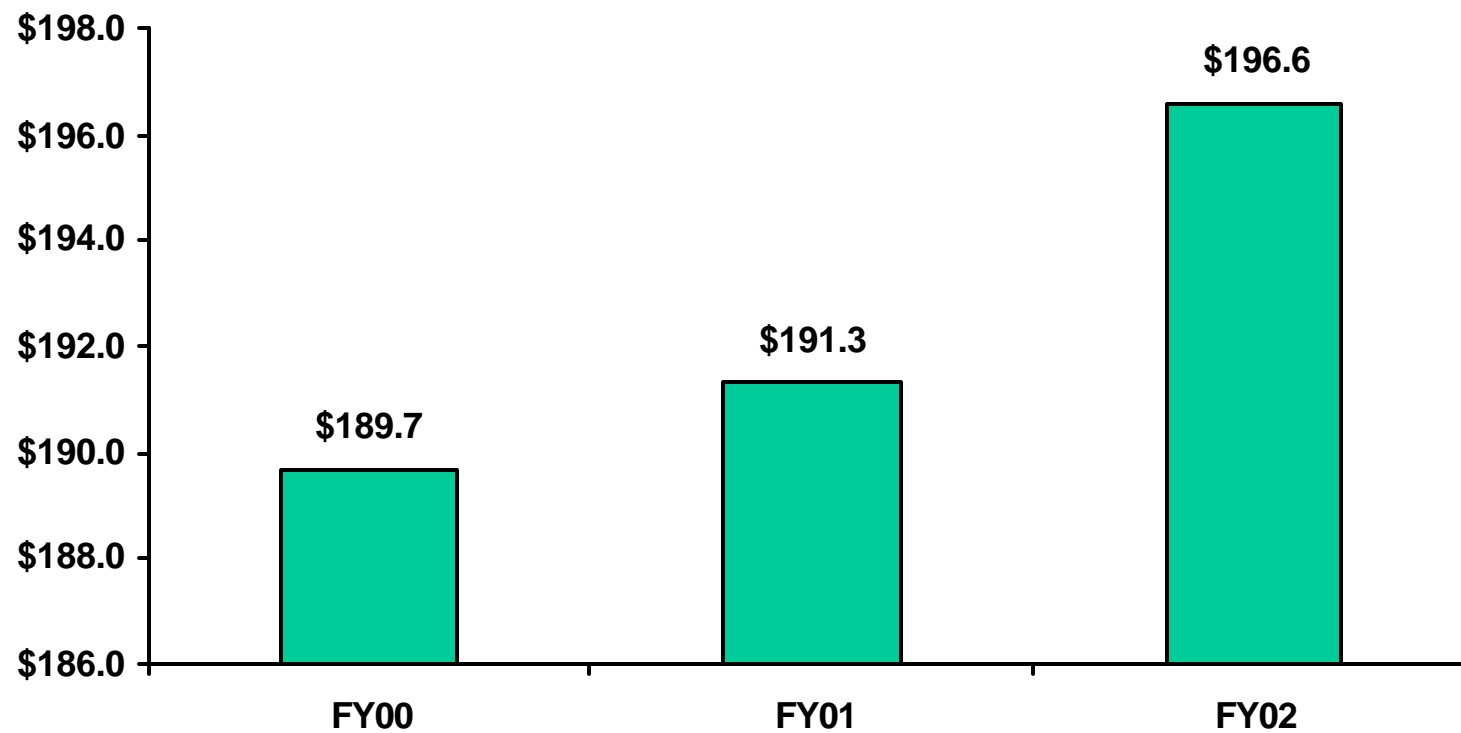
	<u>FY 00</u>	<u>FY01</u>	<u>FY02</u>
Complete Cold Vacuum Drying Facility Construction & Accept.	Comp		
Operate Cold Vacuum Drying Facility	N/A	✓	✓
Complete Canister Storage Building Construction	Comp		
Operate Canister Storage Building	N/A	✓	✓
Operation of 200A Interim Storage Area	✓	✓	✓

✓ - Fully Funded
Comp - Complete



Spent Nuclear Fuel - Focused on Outcomes

Funding Profile



FY 00 Allocation; FY 01 Request; FY02 Target/critical Needs



Spent Nuclear Fuel - Focused on Outcomes

Issues

River Corridor:

- ◆ **None - fully funded**

Breakthrough Opportunities

- ◆ **RL currently reviewing Fluor proposed Sludge Acceleration Strategy**